

**HIGHLY COMPACT, PRECISION LIGHTWEIGHT DEPLOYABLE  
TRUSS WHICH ACCOMMODATES SIDE MOUNTED COMPONENTS**

**ABSTRACT**

A boom structure is deployable from a collapsed, stowable configuration to an elongated truss configuration. The boom structure contains a plurality of truss-forming multi-sided bays. A bay contains a pair of battens joined together at corner regions by foldable longerons. A side of a bay has a plurality of diagonal cord members crossing one another and connected to diagonally opposed corner regions of the side. When the longerons are in their folded positions, the battens are nested together against one another in a stacked arrangement and the diagonal cord members flex into a compact stowed configuration between adjacent battens. The stowed battens are compressed to each other at their corners to form a stowed structure capable of reacting loads.